(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 28 December 2000 (28.12.2000)

PCT

(10) International Publication Number WO 00/78210 A1

(51) International Patent Classification7:

A61B 5/00

(21) International Application Number: PCT/US00/16782

(22) International Filing Date: 15 June 2000 (15.06.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 09/334,996

17 June 1999 (17.06.1999) US

- (71) Applicant: MINIMED INC. [US/US]; 12744 San Fernando Road, Sylmar, CA 91342 (US).
- (72) Inventors: CAUSEY, James, D., III; 2107 Cushman Court, Simi Valley, CA 93063 (US). HAGUE, Clifford, W.; 14570 Benefit Street, N° 303, Sherman Oaks, CA 91403 (US). MASTROTOTARO, John, T.; 10642 Lindbrook Drive, Los Angeles, CA 90024 (US). VAN ANTWERP, William, P.; 26833 Pinehurst Drive, Valencia, CA 91355 (US).
- (74) Agent: KOVELMAN, Paul, H.; MiniMed Inc., 12744 San Fernando Road, Sylmar, CA 91342 (US).

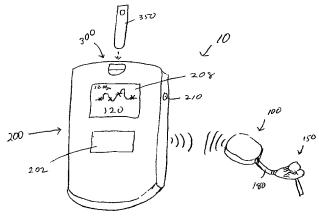
- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHARACTERISTIC MONITOR SYSTEM FOR USE WITH ANALYTE SENSOR



(57) Abstract: A characteristic monitor for use in a system with at least one characteristic sensor that produces a signal indicative of a characteristic of a user includes a housing, a test strip receptacle, a sensor receiver and a processor. The test strip receptacle is for receiving and testing a test strip exposed to an analyte to determine the quantity of the analyte. The sensor receiver is used to receive sensor data signals produced from the at least one characteristic sensor. The processor is coupled to the receiver and the test strip receptacle to process the determined quantity of the analyte and the sensor data signal from the at least one characteristic sensor. The characteristic monitor may further include a transmitter coupled to the processor for transmitting the processed signals to another data receiving device. Preferably, the transmitter transmits the processed signals by radio frequencies. The characteristic monitor may also include a display to show the determined quantity of the analyte and the processed signals from the characteristic sensor. In addition, the characteristic monitor can include a memory to store the determined quantity of the analyte from the test strip receptacle and the processed sensor data signals from the at least one characteristic sensor. Also, the sensor data signals can be received by the sensor receiver continuously, near continuously, and/or intermittently.



00/78210